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October 13, 1998

**VIA HAND DELIVERY**

Magalie Salas, Esquire  
Secretary  
Federal Communications Commission  
1919 M Street, N.W. - Room 222  
Washington, D.C. 20554

Re: ET Docket No. 98-142

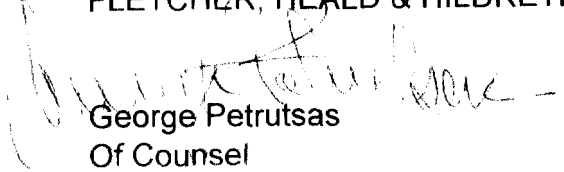
Dear Ms. Salas:

On behalf of the Fixed Point-to-Point Communications Section, Wireless Communications Division of the Telecommunications Industry Association, we are filing an original and five (5) copies of its Reply Comments in the above-referenced rulemaking proceeding.

If additional information is required, please communicate with us.

Very truly yours,

FLETCHER, HEALD & HILDRETH, PLC

  
George Petrutsas  
Of Counsel

GP:cej  
Enclosures



ORIGINAL

BEFORE THE

**Federal Communications Commission**

WASHINGTON, D.C. 20554

DEC 14 1998

In the Matter of

Amendment of Parts 2, 25 and 97 of the  
Commission's Rules with Regard to the  
Mobile-Satellite Service Above 1 GHz

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ET Docket No. 98-142

To: The Commission

**REPLY COMMENTS OF THE  
FIXED POINT-TO-POINT COMMUNICATIONS SECTION,  
WIRELESS COMMUNICATIONS DIVISION OF THE  
TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

The Fixed Point-to-Point Communications Section, Wireless Communications Division, of the Telecommunications Industry Association (the "Fixed Section" or "Section"))<sup>1</sup> submits its Reply Comments in the above-captioned proceeding.

The Fixed Section filed comments in this proceeding addressing primarily the Commission's proposal to make the band 6700-6875 MHz available for geostationary satellite orbit mobile satellite system (NGSO MSS) feeder links, space-to-earth, on a co-primary basis with terrestrial fixed microwave systems. In its Comments, the Section

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<sup>1</sup>The Telecommunications Industry Association ("TIA") is the principal industry association representing telecommunications equipment manufacturers, including manufacturers of terrestrial fixed point-to-point microwave radio service ("FS") equipment. Fixed Section members serve, among others, companies, including telephone carriers, utilities, railroads, state and local governments, and cellular carriers, licensed by the Commission to use private and common carrier bands for provision of important and essential telecommunications services. This comment reflects only the views of the Fixed Point-to-Point Section.

pointed out the importance of the 6525-6875 MHz band as the major relocation band for terrestrial fixed systems being displaced from the 2 GHz band, the increasing occupancy of the band by terrestrial systems, noted the unsatisfactory experience with sharing the 4 GHz band by terrestrial and satellite downlink systems, and argued that extensive technical studies, including simulation studies, should be conducted before the Commission adopts its proposal. Additionally the Section recommended a set of coordination criteria should the Commission conclude that the band be shared by terrestrial fixed and by NGSO-MSS space-to-earth feeder links.

The comments filed by mobile satellite interests,<sup>2</sup> as expected, supported the Commission's proposals, including the proposal to make the 6700-7075 MHz band available for NGSO MSS feeder links, but provided no meaningful information in support of the Commission's tentative conclusion that the band can be shared without interference and without substantial impact on the terrestrial fixed microwave service.<sup>3</sup>

In response to the Commission's question in Paragraph 22 of its Notice about the potential impact of its proposal on the terrestrial fixed service, Constellation Communications stated that it plans to locate its gateway earth stations in rural areas, far from commercial airports, but close to major backbone transmission systems for

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<sup>2</sup>The following satellite interests filed comments: Mobile Communications Holding, Inc. ("MCHI"); ICO Service Limited ("ICO"); AirTouch Communications, Inc.; L/Q License, Inc.; Globalstar, LP filing joint comments ("AirTouch"); Constellation Communications, Inc. ("Constellation"); and Satellite CD Radio, Inc.

<sup>3</sup>ICO stated that the power flux density limits proposed by the Commission "... would provide for full protection of terrestrial services in the 7 GHz bands," ICO Comments, at 3, but offered no information in support of that statement.

ease of interconnecting with the public telephone network.<sup>4</sup> This is hardly reassuring because terrestrial microwave systems, especially long haul systems for which the 6-7 GHz bands are well suited and are extensively used, do operate along such major communications corridors. Additionally, Constellation Communication's statement that it does not plan to construct many gateway stations is also not reassuring because, as UTC notes,<sup>5</sup> the rules proposed by the Commission do not place any limits on the number of NGSO MSS downlinks that would be authorized to operate in the band.

In short, the Section concurs with UTC's views<sup>6</sup> that the NGSO MSS interests have the burden of demonstrating that sharing the 6700-6875 MHz band by satellite downlink feeder links and by terrestrial systems is feasible. The Section points out, however, that the comments filed by the NGSO MSS interests simply do not meet that burden.

The Section notes the comments of the Society of Broadcast Engineers in which the Society expressed its belief that the proposed power flux density (PFD) limits on NGSO MSS downlinks at the Earth's surface would be sufficient to protect from harmful interference terrestrial television relay and mobile systems in the 6875-7075 MHz band.<sup>7</sup> The Section is constrained to point out, however, that while the protection calculated by the Society may be acceptable for the current Broadcast Auxiliary Service

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<sup>4</sup>See, Constellation Comments, p. 3.

<sup>5</sup>See, Comments of UTC, The Telecommunications Association, ("UTC"), p. 1.

<sup>6</sup>See, UTC Comments, p. 2.

<sup>7</sup>See, Comments of the Society of Broadcast Engineers, pp. 3-4.

for analog FM radios, it may not, as the Section demonstrated in its Comments,<sup>8</sup> be adequate to protect many point-to-point digital microwave systems using a very different technology and requiring extremely high reliability.<sup>9</sup>

As UTC points out,<sup>10</sup> the 6525-6875 MHz band must accommodate many of the nearly 30,000 terrestrial microwave links to be displaced from the 2 GHz band. Indeed, the 6 GHz bands were expected to be the primary relocation bands. Moreover, the proposal to make the 175 MHz portion of the band available for NGSO MSS feeder links would affect the entire 350 MHz (6525-6875) of the band because, as UTC has also noted, the current channelization and pairing of the frequencies in that band effectively preclude its partition as proposed by the Commission in this proceeding.

Accordingly, the Section urges the Commission not adopt its proposal with respect to the 6700-7075 MHz portion of the band until it has been demonstrated that:

- (1) The aggregate power flux density resulting from all NGSO-FSS systems will permit satisfactory operation of analog and digital radios in terrestrial systems sharing the band

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<sup>8</sup>See, Fixed Section Comments, p. 5.

<sup>9</sup>In any event, the Society's proposal to exclude NGSO-MSS earth stations from the top 100 TV markets makes good sense and should be seriously considered. This would also mpermit the development of the terrestrial fixed service in the adjacent 6525-6875 MHz, although additional guidelines will be required.


<sup>10</sup>See, UTC Comments, p. 2.

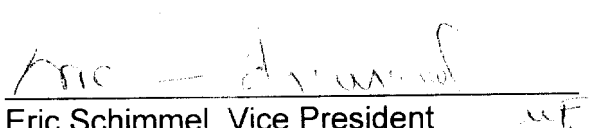
- (2) The deployment of NGSO-FSS earth stations providing feeder downlinks does not constrain future growth of the Fixed Service.

Should the Commission determine to go forward with the proposal in any event, the Commission should adopt meaningful sharing and coordination criteria along the lines of those recommended by the Section in its initial comments.

Respectfully submitted

FIXED POINT-TO-POINT COMMUNICATIONS  
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DIVISION OF THE TELECOMMUNICATIONS  
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Date: October 13, 1998